IN THE CLAIMS:

Please amend claims 1 and 16 as follows:

1. (Currently Amended) A method for estimating a bit error rate of a received signal of a wireless telecommunication system, said method comprising the steps of:

a) estimating a channel impulse response from said received signal;

b) subjecting said received signal to a channel equalizing operation performed by using time domain characteristics derived from said channel impulse response;

c) determining adaptive reference time domain characteristics from an actual weighting information obtained from said channel estimating step;

d) subjecting said received signal to a reference channel equalizing operation performed by using said adaptive reference time domain characteristics; and

e) estimating said bit error rate by comparing output signals of said channel equalizing operation and said reference channel equalizing operation with each other.

2. (Original) A method according to claim 1, wherein said received signal is a matched filtered signal, and wherein said actual weighting information comprises an information obtained from a corresponding matched filter operation.

3. (Previously Presented) A method according to claim 1, wherein said channel impulse response is estimated by using correlations between received and known training sequences.

4. (Original) A method according to claim 3, wherein said correlations represent delay spread and multi path propagation effects caused by a radio channel through which

said received signal has been transmitted.

5. (Previously Presented) A method according to claim 3, wherein said correlations are a decision metric addition to matched filtered samples.

6. (Previously Presented) A method according to claim 1, wherein said adaptive reference time domain characteristics are a channel delay spread and signal distortion metric in said reference channel equalizing operation.

7. (Original) A method according to claim 1, wherein said estimating of said bit error rate is performed by calculating a difference between said output signals of said channel equalizing operation and said reference channel equalizing operation over a predetermined measuring period.

Claims 8-15 (Cancelled)

16. (Currently Amended) An apparatus for estimating a bit error rate in a received signal of a wireless telecommunication system, said apparatus comprising:

a) estimating means for estimating a channel impulse response from said received signal;

b) channel equalizing means for subjecting said received signal to a channel equalizing operation performed by using time domain characteristics derived from said channel impulse response;

c) determining means for determining adaptive reference time domain characteristics from an actual weighting information supplied from said estimating means;

d) reference channel equalizing means for subjecting

said received signal to a reference channel equalizing operation performed by using said adaptive reference time domain characteristics; and

e) comparing means for comparing output signals of said channel equalizing means and said reference channel equalizing means with each other to obtain said estimation of said bit error rate.

17. (Previously Presented) An apparatus according to claim 16, further comprising a matched filter through which said received signal is supplied to said channel equalizing means and said reference channel equalizing means, wherein said weighting information comprises an information obtained from said matched filter.

18. (Previously Presented) An apparatus according to claim 16, wherein said estimating means is arranged to estimate said channel impulse response by using correlations between received and known training sequences.

19. (Previously Presented) An apparatus according to claim 18, wherein said channel equalizing means is arranged to estimate by using said correlations as a decision metric addition to matched filtered samples.

20. (Previously Presented) An apparatus according to claim 16, wherein said reference channel equalizing means is arranged to estimate by using said adaptive reference time domain characteristics as a channel delay spread and signal distortion metric.

21. (Previously Presented) An apparatus according to claim 16, wherein said comparing means comprises counting means

for counting the differences between the output signals of said channel equalizing means and said reference channel equalizing means over a predetermined measuring period.

Claims 22-25 (Cancelled)